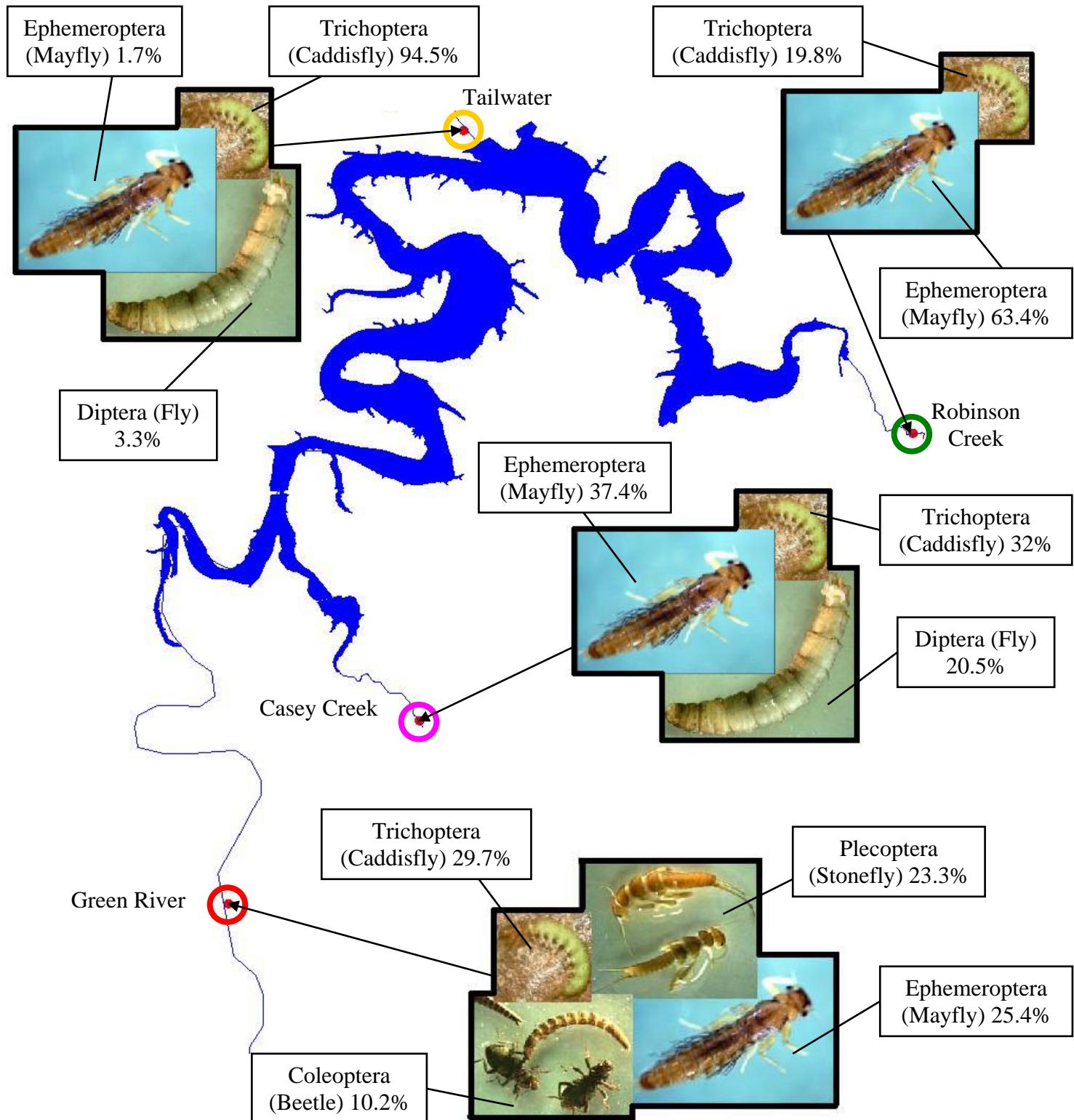


Aquatic Insects' Community Structure  
Green River Lake Analysis  
September 8 & 9, 2004

Relative abundance of dominant taxa found at the sites shown below.



COMMUNITY METRICS *	Green Lake			
	Tailwater	Green River	Robinson Creek	Casey Creek
Collection Date	9/9/04	9/8/04	9/8/04	9/8/04
Total Number of Taxa	25	45	32	34
% Contribution of Dominant Taxa	94	59	73	62
Modified Hilsenhoff Biotic Index (0, good – 10, bad)	6.21	4.78	5.36	5.01
Shannon-Wiener Index	0.95	2.77	2.43	2.81
Number of Ephemeroptera Taxa	3	10	8	5
% Ephemeroptera Taxa (Abundance)	1	21	63	37
Number of Plecoptera Taxa	0	3	1	1
% Plecoptera Taxa (Abundance)	0	20	2	3
Number of Trichoptera Taxa	4	6	3	9
% Trichoptera Taxa (Abundance)	83	25	20	32
Number of EPT Taxa	7	19	12	15
% EPT Taxa	85	66	84	71
Number of Dipteran Taxa	11	18	8	13
% Dipteran Taxa	3	8	9	20
Number of Chironomid Taxa	8	14	6	10
% Chironomid Taxa	2	7	7	18
Number of Tanytarsini Taxa	1	1	2	2
% Tanytarsini Taxa	1	2	2	10
Number of Orthocladiinae Taxa	2	6	1	4
% Orthocladiinae Taxa	0	2	1	6
% Cricotopus + Chironomus/Total Chiron.	2	7	17	20
Number of Dipteran Taxa – Tanytarsini and other Non-Insect Taxa	15	23	10	13
% Dipteran Taxa - Tanytarsini and other Non-Insect Taxa	14	22	8	11
Ratio of EPT to Chiron. Abundance	35.14	9.66	12.63	3.90
Percent Tolerant Organisms	1	1	0	0
Number of Individuals / m <sup>2</sup>	10,319	3,714	3,078	2,492
* Based on 4 replicate surber samples Substrate sampled – small stones				

#### 5 Most Abundant Taxa in the Tailwater

- Cheumatopsyche sp. (Trichoptera) 90%
- Hydropsyche dicantha (Trichoptera) 3%
- Tricorythodes sp. (Ephemeroptera) 1.5%
- Rheotanytarsus exiguis group sp. (Diptera) 1.3%
- Polypedilum flavum (Diptera) 0.8%

#### 5 Most Abundant Taxa on Green River

- Macrostemum zebratum (Trichoptera) 22.6%
- Perlidae gen. sp. (Plecoptera) 10.5%
- Caenis diminuta group sp. (Ephemeroptera) 9.8%
- Attaneuria sp. (Plecoptera) 9.6%
- Baetis intercalaris (Ephemeroptera) 9.6%
- Stenelmis sp. (Coleoptera) 6.8%

#### 5 Most Abundant Taxa on Robinson Creek

- Caenis sp. (Ephemeroptera) 32.1%
- Chimarra obscura (Trichoptera) 14.9%
- Baetis intercalaris (Ephemeroptera) 10.8%
- Isonychia sp. (Ephemeroptera) 9.2%
- Baetis sp. (Ephemeroptera) 6.2%

#### 5 Most Abundant Taxa on Casey Creek

- Caenis diminuta group sp. (Ephemeroptera) 15.8%
- Isonychia sp. (Ephemeroptera) 13.1%
- Chimarra obscura (Trichoptera) 12.5%
- Cheumatopsyche sp. (Trichoptera) 11.4%
- Rheotanytarsus exiguis group sp. (Diptera) 9.5%